

NR-19-7515



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C10-6
Job Sheet 198346



Part No: C10-6

Job Qty: 10 pcs

Part Name: Trunnion



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/25/19

Job Tracking No:

Due Date: 8/26/19

Created By: Jennifer Renwick

Type: Stock

Description:

Note: DWG C10-5A/C10-5KA Rev. 3 IPP Rev. A 18.04.18 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Run Hrs Hrs	Workcenter/Supplier	Workcenter / Supplier Lead Time	Sign-off
120	SL-154 - 1	10 pcs	8/26/19	8/26/19	1.50 1.25	SL-154 - 1		17/08/09
130	QC 2	10 pcs	8/26/19	8/26/19	0.00 0.00	QC 2 - 1		
						QC 2 - 12		
						QC 2 - 14		
						QC 2 - 17		
						QC 2 - 19		
						QC 2 - 2		
						QC 2 - 20		
						QC 2 - 22		
						QC 2 - 23		
						QC 2 - 25		
						QC 2 - 32		
						QC 2 - 33		17/08/09
						QC 2 - 35		
						QC 2 - 39		
						QC 2 - 4		
						QC 2 - 40		
						QC 2 - 44		
						QC 2 - 46		
						QC 2 - 48		
						QC 2 - 49		
						QC 2 - 50		
						QC 2 - 51		
						QC 2 - 52		
						QC 2 - 57		
						QC 2 - 62		
						QC 2 - 63		
						QC 2 - 8		
						QC 2 - 66		
						QC 2 - 64		
						QC 2 - 65		
						QC 2 - 5		
						QC 2 - 71		
						QC 2 - 73		
						QC 2 - 69		
140	NV5000 - 1 - B4B	10 pcs	8/26/19	8/26/19	0.50 5.00	NV5000 - 1 - B4B		
						NV5000 - 2 - B4B		17-08-09
150	QC 2	10 pcs	8/26/19	8/26/19	0.00 0.00	QC 2 - 1		
						QC 2 - 12		
						QC 2 - 14		
						QC 2 - 17		
						QC 2 - 19		



DART
AEROSPACE

Container No: **S204475**



Part: **C10 - 6**
Job No: **198346**
Serial No/Batch: **S204475**
Revision: **3**
Inspector:
Exp Date:
Instructions:

Date: **08/09/19**

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 813 632-6200
Email: sales@dartaero.com
www.dartaerospace.com

Plex 7/25/19 8:53 AM Dart.Renwick.Jennifer

Plex 7/25/19 8:53 AM Dart.Renwick.Jennife

PTO-1

[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

				QC 2 - 2	
				QC 2 - 20	
				QC 2 - 22	
				QC 2 - 23	
				QC 2 - 25	
				QC 2 - 32	J.C.L. 19-08-24
				QC 2 - 33	
				QC 2 - 35	
				QC 2 - 39	
				QC 2 - 4	
				QC 2 - 40	
				QC 2 - 44	
				QC 2 - 45	
				QC 2 - 48	
				QC 2 - 49	
				QC 2 - 50	
				QC 2 - 51	
				QC 2 - 52	
				QC 2 - 57	
				QC 2 - 62	
				QC 2 - 63	
				QC 2 - 8	
				QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
160 QC 8	10 pcs	8/26/19	0.00 0.00	QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	mon 9/3/19
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
170 Outsource - 1 - Heat Treat	10 pcs	8/26/19		GRO002-VC-ATL002	10 19-09-04
180 Packaging 2-1 - Receive - B4B	10 pcs	8/26/19	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
					Plex 7/25/19 8:53 AM Dart.Renwick.Jennife

Maxime
←

Lim

Derrell

Plex 7/25/19 8:53 AM Dart.Renwick.Jennife

160 - (QC8- Inspect parts - second check)
170 - (Outsource process - Heat Treat) 1-Issue P/O to METCORE; P/O 44422 RC 44-46 2-Bead blast 3-
Material type; 4140 4- Certificate of Conformity is required
180 - (Receive & Inspect for Damage & Mat'l Certs)
190 - (QC5- All purchased or subcontracted products)
200 - (Identify as per dwg & Stock Location: _____)
210 - (QC21- Final Inspection - Work Order Release)

Part / Item	Component Name	Quantity	Operation	Container
M4140H-R1.500	4140 Round Bar 1.500	3.5500 ft (.355 ea)	120-SL-154 - 1	5070823

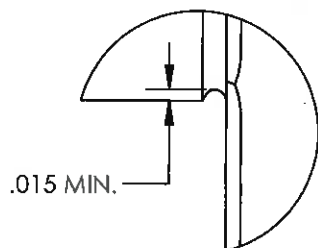
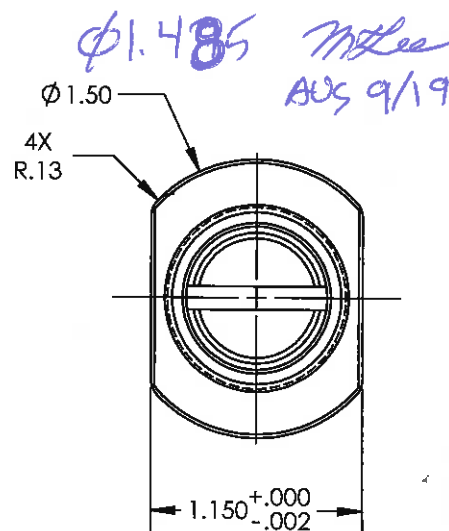
Operation	Component Part	Required	Inventory	Allocated
120-SL-154 - 1	M4140H-R1.500	4	5	0

Specifications could not be found.

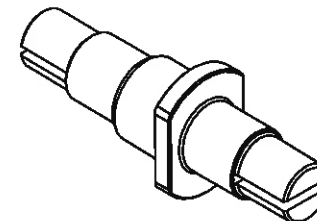
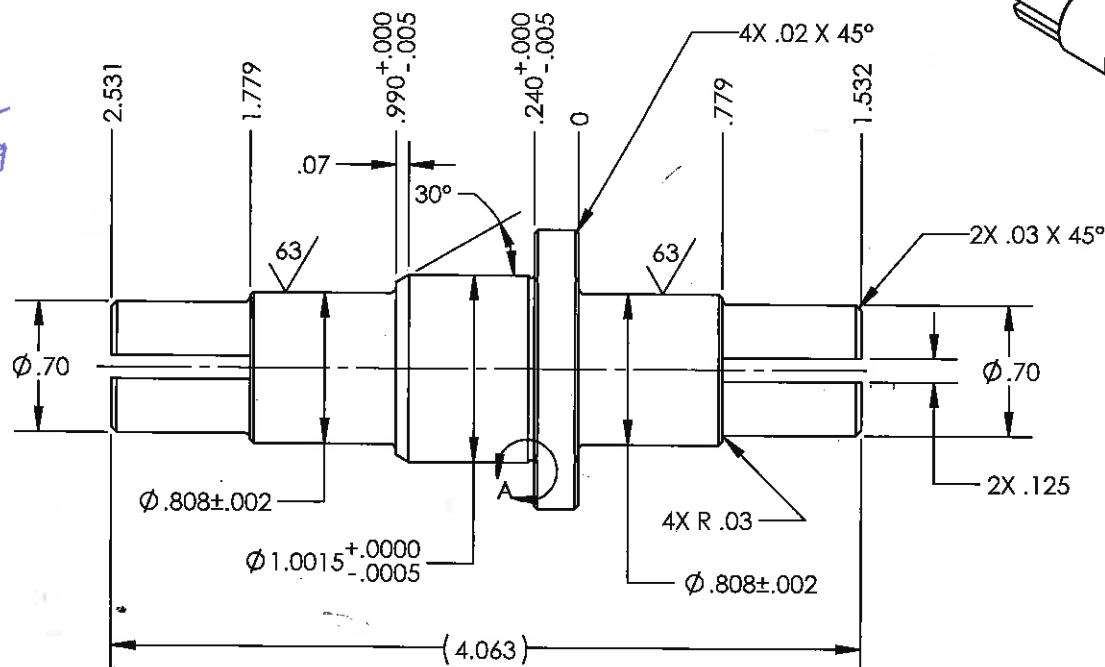
https://www.plexonline.com/5acbbe1f-3f43-4663-a17f-a9277ae4fdd3/Plexus_Control/Report_Viewer_2.asp?URL=https://www.plexonline.com/5acbbe1... 4/4

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
D		AS DRAWN BY APICAL	5/1/2013	CFS	
1		C10-6 CH'D TOLERANCE WAS 1.500+0.000-.002 IS Ø1.50.	10/9/2013	CFS	GE
2	14-0114	C10-6 ADDED BAG & LABEL NOTE.	8/8/2014	DPD	RW



DETAIL A
SCALE 4:1



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 198346

(C10-6)

TRUNNION

NOTES:

1. NICKEL PLATE APPLIED AT ASSEMBLIES C10-5A & C10-5KA.
2. BAG & LABEL WITH BATCH NUMBER.

DART AEROSPACE	
TITLE LOAD BEAM ASSEMBLIES	
DWG NO. C10-5A/C10-5KA	REV 3
MAT'L 4140/4142	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Wed</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT HRC 44-46
.XX ± .01 ANGLES ± .5°	FINISH SEE SHEETS 2 & 3 NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 5/22/2002
SHEET 6 OF 6	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044422



Supplier: ATL002-VC
Atlantic Heat Treat 2001
401 Frankcom
Ajax
ON
L1S 1R4 Canada
Phone: 866 257 6395

Attention: Ananth, Nimmy

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044422

PO Date: 9/4/19

Due Date: 9/13/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Pynt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	198489	RBD29823-5A	Tail Rotor Nut Wrench "D" Model (New Design) HEAT TREATING 1-Issue P/O RC 44-47 Material 4130 2-Bead blast Lightly oil 3- Certificate of Conformity is required	Firmed -		9/13/19	6 pcs	0 pcs	6 pcs	\$14.1666/pcs	\$85.00
2	198346	C10-6	Trunnion (Outsource process - Heat Treat) 1-Issue P/O RC 44-46 2-Bead blast 3-Material type; 4140 Lightly oil 4- Certificate of Conformity is required	Firmed -		9/13/19	9 pcs	0 pcs	9 pcs	\$20.00/pcs	\$180.00
3	199745	RB T102137-107-105	Strap 1-Issue P/O; RC 48-52 2-Bead blast 3-Material type; O1 Lightly oil 4- Certificate of Conformity is required	Firmed -		9/12/19	4 pcs	0 pcs	4 pcs	\$15.4545/pcs	\$61.82



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PURCHASE ORDER

POHB044422



Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
	199742	✓		Firmed	-	9/13/19	7 pcs	0 pcs	7 pcs	\$15.4545/pcs	\$108.18
Sub Total:							11	0	11		\$170.00
SEP 10 2019 AC											
Grand Total:											\$435.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 9/9/19 2:50 PM Dart.Guerin.Kimberley

Atlantic Heat Treating (2001) Ltd

Order No.: 169734

Ship Date: 5/9/2019

Shipping Ticket

Sold To:
DART AEROSPACE LTD.
1270 ABERDEEN ST

1448

HAWKESBURY ON K6A 1K7

Ship To:
DART AEROSPACE LTD.
1270 ABERDEEN ST

166597

HAWKESBURY ON K6A 1K7

Page 1 of 1

Purchase Order Number	Packing List No	Customer Job No	Route	Carrier
POHB044422				

Quantity	Part No. / Part Name / Part Description	Pounds
9 PCS	MATERIAL 4140 ANNEAL AND HEAT TREAT TO 44-46RC BEAD BLAST, C OF C, PRT# C10-6, JOB# 198346	DAS 61 9-89

Container Type	# Of Containers	Cust Cont Id	Container Type	# Of Containers	Cust Cont Id
BOX	1				

NOTICE: OUR LIABILITY IS LIMITED TO OUR INVOICE CHARGES ONLY

Shipped Complete

Quantity Shipped: 9
Pounds Shipped: 2.00**RECEIVED**

SEP 13 2019

DART AEROSPACE LTD.

AB
45 RC

9-12-19

Order No.: 169734	Shipped Complete	Quantity Shipped:	9.00
Received By:	Date:	Pounds Shipped:	2.00

Sold To: DART AEROSPACE LTD.

Shipped ON: 09/05/2019

Certification

Date: 09/12/2019

Entry Date: 09/05/2019

Page: 1 of 1

To:DART AEROSPACE LTD.
1270 ABERDEEN ST

Purchase Order No.: POHB044422

Packing List No.:

HAWKESBURY ON K6A 1K7

Material: 4140

We are pleased to provide you with the following Certificate of Compliance.

Quantity	Part Number / Part Name / Part Description	Pounds
9	9 PCS MATERIAL 4140 ANNEAL AND HEAT TREAT TO 44-46RC BEAD BLAST, C OF C, PRT# C10-6, JOB# 198346	2

DAS
61
9-89

Insp. Type	Scale	Minimum	Maximum	Number	Other
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Customer Requirements:

Harden rockwell

Results:

Harden ROCKWE 44. 46. 45. TESTED AS PER SAMPLING PLAN

HEAT TREATED TO 45 RC AS PER CUSTOMER REQUEST

STATEMENT OF LIMITED LIABILITY (PLEASE READ CAREFULLY): ALL WORK IS ACCEPTED SUBJECT TO THE FOLLOWING CONDITIONS: It is recognized that even after employing all the scientific methods known to us, hazards still remain in metal treating. THEREFORE, OUR LIABILITY SHALL NOT EXCEED TWICE THE AMOUNT OF OUR CHARGES FOR THE WORK DONE ON ANY MATERIAL (FIRST TO REIMBURSE FOR THE CHARGES AND SECOND TO COMPENSATE IN THE AMOUNT OF THE CHARGES), EXCEPT BY WRITTEN AGREEMENT SIGNED BY THE METAL TREATER. THE CUSTOMER, BY CONTRACTING FOR METAL TREATMENT, AGREES TO ACCEPT THE LIMITS OF LIABILITY AS EXPRESSED IN THIS STATEMENT TO THE EXCLUSION OF ANY AND ALL PROVISIONS AS TO LIABILITY ON THE CUSTOMER'S OWN INVOICES, PURCHASE ORDERS OR OTHER DOCUMENTS. IF THE CUSTOMER DESIRES HIS OWN PROVISIONS AS TO LIABILITY TO REMAIN IN FORCE AND EFFECT, THIS MUST BE AGREED TO IN WRITING, SIGNED BY AN OFFICER OF THE TREATER. IN SUCH EVENT, A DIFFERENT CHARGE FOR OUR SERVICES REFLECTING THE HIGHER RISK TO TREATER, SHALL BE DETERMINED BY THE TREATER AND CUSTOMER. THE TREATER MAKES NO EXPRESS OR IMPLIED WARRANTIES AND SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF THE FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, AS TO THE PERFORMANCE OF CAPABILITIES OF THE MATERIAL AS HEAT TREATED, OR THE HEAT TREATMENT. THE AFOREMENTIONED LIMITATION OF LIABILITY STATED ABOVE IS SPECIFICALLY IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, AND OF ANY OTHER SUCH OBLIGATION ON THE PART OF THE TREATER. No claim for shortage in weight or count will be entertained unless presented within five (5) working days after receipt of materials by customer. No claim will be allowed for shrinkage, expansion, deformity, or rupture of material in treating or straightening, except by prior written agreement, as above, nor in any case for rupture caused by or occurring during subsequent grinding. Whenever we are given material with detailed instructions as to treatment, our responsibility shall end with the carrying out of those instructions. Failure by a customer to indicate plainly and correctly the kind of material (i.e., proper alloy designation) to be treated, shall cause an extra charge to be made to cover any additional expense incurred as a result thereof, but shall not change the limitation of liability stated above. Customer agrees there will be no liability on the treater in contract for any special, indirect or consequential damages arising whatsoever, including but not limited to personal injury, property damage, loss of profits, loss of production, recall or any other losses, expenses or liabilities allegedly occasioned by the work performed on the part of the treater. It shall be the duty of the customer to inspect the merchandise immediately upon its return, and in any event claims must be reported prior to the time that any further processing, assembling or any other work undertaken. OUR LIABILITY TO OUR CUSTOMERS SHALL CEASE ONCE ANY FURTHER PROCESSING, ASSEMBLING OR ANY OTHER WORK HAS BEEN UNDERTAKEN ON SAID MATERIAL. No agent or representative is authorized to alter the above conditions, except by writing duly signed by an officer of treater.

RICK BUGGY
QUALITY CONTROL
ATLANTIC HEAT TREATING 2001 LTD

Entered: 7/5Date: Oct 23/19NCR No. 19-7515

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

Job: <u>198346</u> Part No. <u>C10-8</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☒ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐		
Date: <u>19/08/29</u>	Sequence #: <u>140</u>	QTY Affected: <u>9</u>		MRB (Q51042) DAS 55 9-89 <u>19-08-29</u>
Description Work Order Deviation The slitting saw wasn't well seated on holder and the two slot end up being at 0.138" instead of 0.125" and it's offset by 0.012"		Disposition <u>Scrap & destroy</u>		Completed By <u>J.C.L.</u> <u>19-08-29</u> Lead hand / Supervisor <u>A.E.</u> <u>19-08-29</u> QC / QA Coordinator DAS 68 9-89 AUG 29 2019
Root Cause Operator ☒ Manufacturing Process ☐ Equip/Tooling ☒ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread		
		Other/Details: <u>Tool positioned wrong</u>		